








# Three Phase Hybrid Inverter

THH-10KW/20KW-EU-1



-  100% three-phase unbalanced output, with each phase capable of delivering up to 50% of the rated power.
-  Ac coupling to retrofit existing solar system.
-  Max. 10 pcs parallel for on-grid and on-grid.
-  Support multiple batteries parallel.
-  High voltage battery, higher efficiency
-  6 time periods for battery charging/discharging
-  Support storing energy from diesel generator



# Technical Data

Model	THH-10KW-EU-1	THH-20KW-EU-1
<b>PV String Input</b>		
Max. DC Input Power (W)	13000	26000
Max. DC Input Voltage (V)		1000
Start-up Voltage (V)		180
MPPT Range (V)		150-850
Full Load DC Voltage Range (V)	325-850	500-850
Rated DC Input Voltage (V)		600
PV Input Current (A)	20+20	26+26
Max. PV Isc (A)	30+30	39+39
No.of MPPT Trackers		2
No.of Strings per MPPT Tracker	1+1	2+2
<b>AC Output</b>		
Rated AC Output Power (W)	10000	20000
Max. AC Output Power (W)		11000
AC Output Rated Current (A)		15
Max. AC Output Current (A)		16.5
Max. Three-phase Unbalanced Output	22	35
Max. Continuous AC Passthrough (A)		40
Peak Power (Off Grid)	1.5 times of rated power, 10 S	
Generator Input/Smart Load/AC Couple	15.2/40/15.2	30.4/80/30.4
Power Factor	0.8 leading - 0.8 lagging	
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380Vac, 230/400Vac	
Grid Type	Three Phase	
Total Harmonics Current Distortion (THDi)	<3% (of nominal power)	
DC Current Injection	<0.5% In	
<b>Battery</b>		
Battery Type	Lithium-ion	
Battery Voltage Range (V)	160-700	
Max. Charging Current (A)	37	
Max. Discharging Current (A)	37	
Number of Battery Input	1	
Charging Strategy for Li-Ion Battery	Self-adaption to BMS	
<b>Efficiency</b>		
Max. Efficiency	97.6%	
Euro Efficiency	97%	
MPPT Efficiency	99%	
<b>Protection</b>		
Anti-islanding Protection	Yes	
PV String Input Reverse Polarity Protection	Yes	
Insulation Resistor Detection	Yes	
Residual Current Monitoring Unit	Yes	
Output Over Current Protection	Yes	
Output Shorted Protection	Yes	
Surge Protection	Yes	
Arc Fault Circuit Interruption (AFCI optional)	Yes	
Over Voltage Category	DC Type II/AC Type III	
<b>Certifications and Standards</b>		
Grid Regulation	IEC61727/62116, EN50549-1	
Safety EMC / Standard	IEC/EN 61000-6-1/2/3/4, IEC/EN 62109-1, IEC/EN 62109-2	
<b>General Data</b>		
Operating Temperature Range (°C)	-40-60°C, >45°C Derating	
Cooling	Smart Cooling	
Noise (dB)	≤65 dB	
Communication with BMS	CAN	
Monitoring mode	WIFI , APP	
Weight (kg)	80	
Size (WxHxD mm)	408×638×237 (Excluding Connectors and Brackets)	
Ingress Protection	Ip65	
Installation Style	Wall-mounted	
Warranty	5 Years (10 Years Optional)	